

ECTAMAGG113

CTAF

CTAR

ALLELE 1 : 74	tagatataATGTTTACAGGATTACAATAATTCACTCGTATTTAGGAATTC	133
ALLELE 2 : 61	-----ATCATGTTTACAGGATTACAATAATTCACTCGTATTTAGGAATTC	113

ECCM AAC405

A2D8F

ALLEL1 :	1	TTAAACCTTGCGTGTATCGGTATACAGTAGCGAGGGCA-----
ALLEL2 :	1	TTAAACCTTGCGTGTATCGGTATACAGTAGCGAGGGCA-tggtttttagccatTCGAACTAATAATT-TGCA

ALLELE1: 62 AACGATAATATAAGAAAAAGAC - aCACTTGGGGCATTTTGACTCTGAGAGAACTCAGGTCAATC
A2D8R

ALLELE2: 74 AACGATAATAATTATAAGAAAAGACE-CACITGAGGGCAATTGAGCTTACCCAAACCGAAAGCAAACCCAAACGCGAGAGAAAC1AGGIAAACIAAG
ALLELE1: 138 AAGCAAACGGCTGTTACCTTGAGCTGAAACACCTGGAGGAAGCAAGGAAAGCCTGGAGGAAGCAAACCCAAACGCGAGAGAAAC1AGGIAAACIAAG

ALLELE2 : 150 AAGCAACGCTGTTACCTTGAGCTAAACCTGAGGAAGCAAAGCAGAACCAAACCCGAGAGAAATAAAG
MICROSATELLITE

ALLELE1: 214 AACGGAAACAGAGGAACTTGTCAAGGAACTTAGGCGCTGGCGTGGG
ALLELE2: 226 AACGGAAAC---AGAGAGAGGAAGGACCTTGTCAAGGAACTTAGGCGCTGGCGTGGG

ALLELE1: 291 GGTCAATAAGCGTAACCTGGCTGAGGAAGCCCTGGCG - tCGTCCCTTGCTGAAGCAGAAGGAAAGAG - CacGAGA
ALLELE2: 292 GGTCAATAAGCGTAACCTGGCTGAGGAAGCCCTGGCG - CGTCCTTGCTGAAGCAGAAGGAAAGAGCC-CGAGA

ALLELE1:	365	CCAGAGAAACTCCTCGAAGCAACGGGAATTC	397
ALLELE2:	373	CCAGAGAAACTCCTCGAAGCAACGGGAATTC	405

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ECCGMAGA116

Allele 1: 1 GAATTCCGGTATCTCAGACAACCTTTGTTGGTTGGTTATAGTAAGAACACGATTAT
Allele 2: 1 GAATTCCGGTATCTCAGACAACCTTTGTTGGTTGGTTATAGTAAGAACACGATTAT					

Allele 1: 60 CCAGGCCCTTGAGAGGCATAAGAAATTAATTTTTATATAAAAAGTCTCTTAA

Allele 2: 60 CCAGGCCCTTGAGAGGCATAAGAAATTAATTTTTATATAAAAAGTCTCTTAA

EATGMCGA87

Allele 1: 1 GAATTCTGGTGTCTCTTAT----GACATTTGGCCAAAGTAATACTATAATTCAAGATTGGTTT
 |||||||
 |||||||
Allele 2: 1 GAATTCTGGTGTCTCTTATCTGACATTTGGCCAAAGTAATACTATAATTCAAGATTGGTTT
 |||||||

Allele 1: 68 CTGATTAACCGTGGTCGTTAA 87

Allele 2: 73 CAGATTAACCGTGGTCGTTAA 92

ECCC MATG161

Allele1: 1 TTAATGAAAATCGATCAAATCAAATAATATGCTTTTTAGTTG-gGTTCAAGT-ACT
 |||||||
 |||||||
Allele2: 1 TTAATGAAAATCGATCAAATCAAATAATATGCTTTTTAGTTGt-GTTCAAGTaaCT

Allele1: 61 TTTTTTATTGAAAAATCGACCCAAAGTTGAACACATGTTGAAATTGTTGT 116

Allele2: 62 TTTTTTATTGAAAAATCGACCCAAAGTTGAACACATGTTGAAATTGTTGT 117

Allele1: 117 GCATCCAACGGTTCTGACATCAATCAGCTGAGAGGGAAATC 161

Allele2: 118 GCATCCAACGGTTCTGACATCAATCAGCTGAGAGGGAAATC 162

ECCAMAGC114

Allele1: 1 GAATTCCAGGC-AGATTGGTATCAAACATGTTGTCACAAAATGTTCAAGCATCTTA 59
 |||||||
 |||||||
Allele2: 1 GAATTCCAG-CAGATTGCTATTCTTACTCTAAACATGTTGTCACAAAATGTTCAAGCATCTTA 59

Allele1: 60 GGGAACTGCTATTCTTACTCTAAATTCTTATTGACATCCAAGTGTGCTTTAA 114

Allele2: 60 GGGAACTGCTATTCTTACTCTAAATTCTTATTGACATCCAAGTGTGCTTTAA 114

FIG. 1a-2

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same

Applicant: Lightfoot et al.
Serial No.: 09/772,134

EArgMcGA87 BAC extension and TaqMan probe and primers

Allele 1: ttatcatccaaattaaaatggaaaactttataacaatggcacattttggagccatattcatgtc
Allele 2: ttatcatccaaattaaaatggaaaactttataacaatggcacattttggagccatattcatgtc
TMA5F
Allele 1: atctttggtctgagtcattcatctgtggattgaattcatggtttcctttat-----gacatgttt
Allele 2: atctttggtctgagtcattcatctgtggattgaattcatggtttcctttatgacatgttt
TMA5R TMA5-S
Allele 1: GCGAAGTAATACTACTATAAAATTCAGATTGGATTTCCTGATAACCGTGTAAATactataataataacc
Allele 2: GCGAAGTAATACTACTATAAAATTCAGATTGGATTGGTTCAGATAACCGTGTAAATactataataacc
ATG4BACF

FIG. 1b

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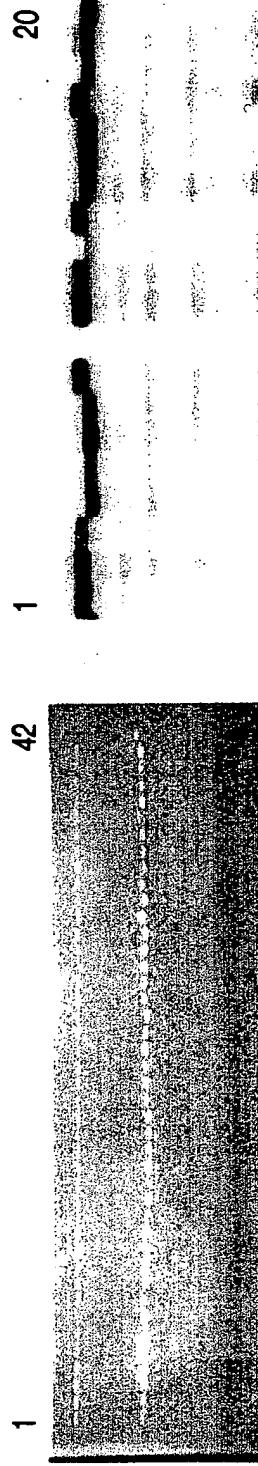


FIG. 2A

1111222EF 22121112111

FIG. 2B

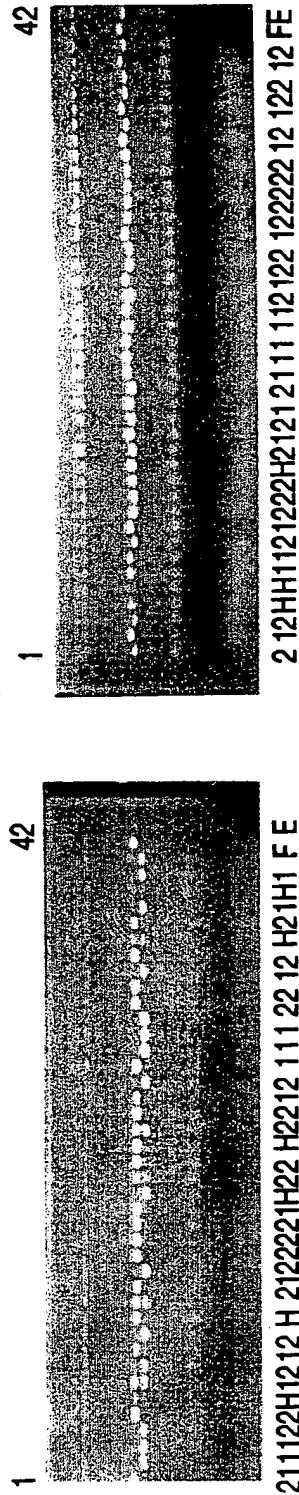


FIG. 2C

FIG. 2D

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same

Appl. No.: Lightfoot et al.
Serial No.: 09/772,134

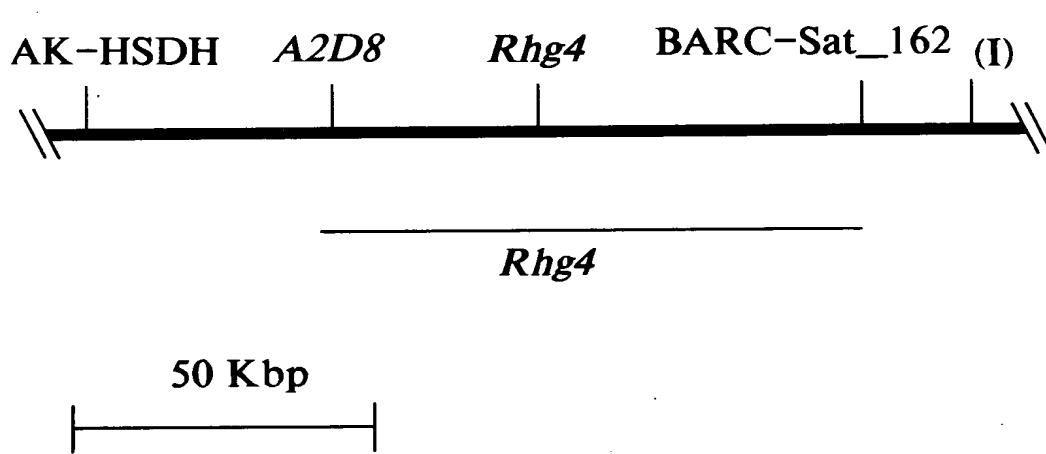


FIG. 3

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same

Applicant
Serial No.

Lightfoot et al.
09/772,134

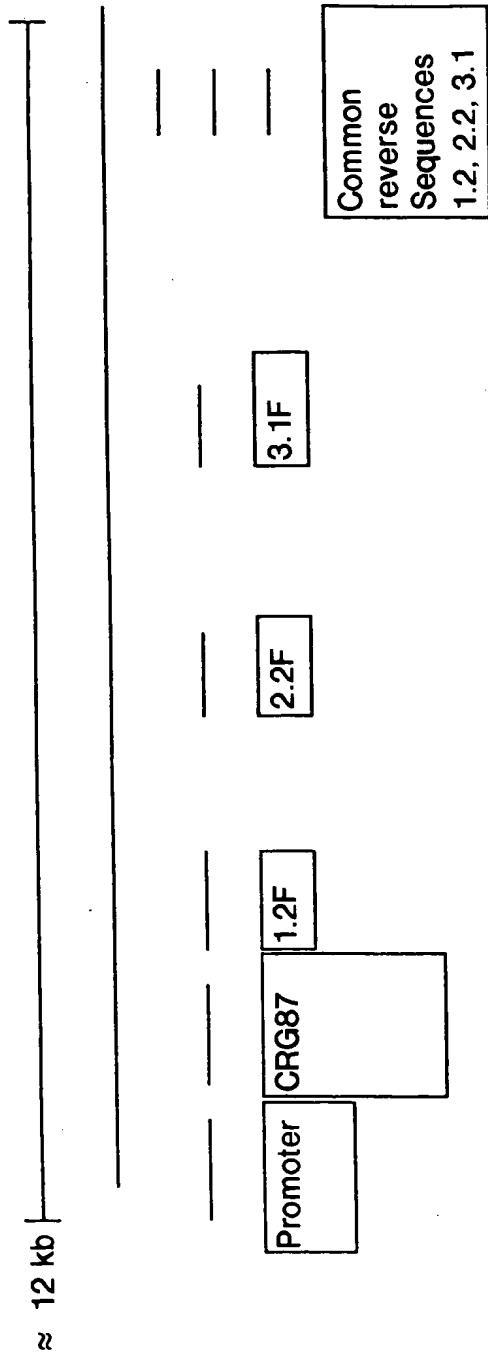


FIG. 4

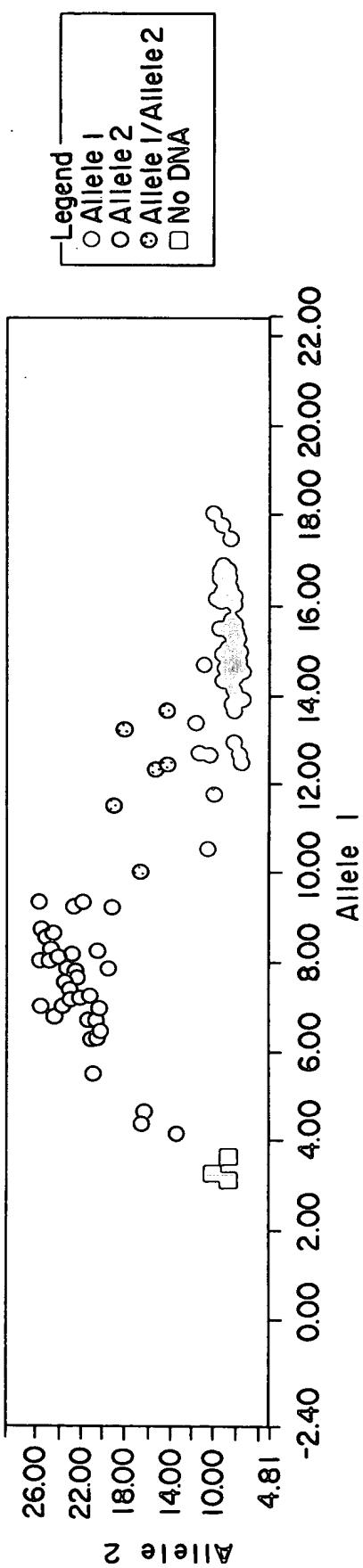


FIG. 5A

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FIG. 6A

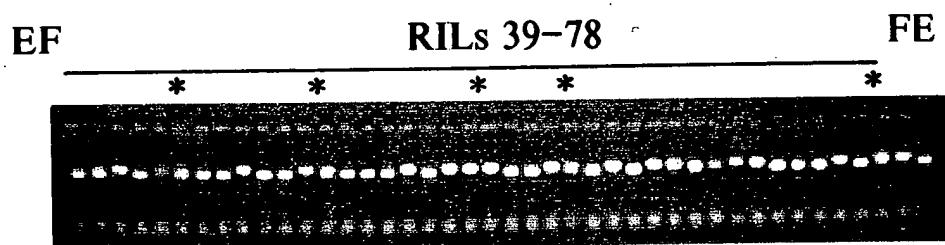
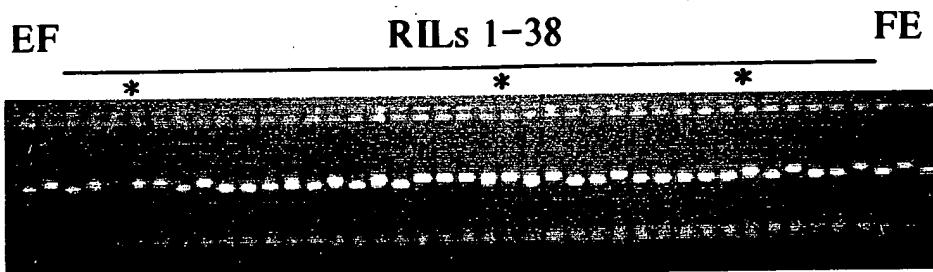


FIG. 6B

Synthetic rhg1 gene

1
AATGGGAGGAGTGGAAAGACAGTGGCTATGGAGCTTGGAGGTTGGGTTGGAAT
CAAGTGTGCTCAGGGACAGGTTATTGTGATCCAGCCTCCTGGAAAGGGTTGAGGGGTC
GAATCACCGACAAAATTGCCAACCTCAAGGCCTCAGGAAGCTTAGTCTTCATGATAAC
CAAATTGGTGGTTCAATCCCTCAACTTGGGACTTCTCCAACCTTAGAGGGGTTCA
GTTATTCAACAATAGGCTTACAGGTTCCATACCTCTTCTTAGGTTCTGCCTTGCT
TCAAGTCTCTTGACCTCAGCAACAATTGCTCACAGGAGCAATCCCTATAGTCTTGCT
AATTCCACTAAGCTTATTGGCTTAACTTGAGTTCAACTCCTCTGGTCTTAC
AGCTAGCCTAACTCACTCATTTCTCACTTTCTCTTCAAAATAACAATCTT
CTGGCTCCCTCTAACCTCTGGGTGGATTCCAAGAATGGCTCTTAGGCTCAA
AATTGATCCTAGATCATAACTTTCACTGGTGACGTTCTGCTCTGGTAGCTT
AAGAGAGCTCAATGAGATTCCCTAGTCATAATAAGTTAGTGGAGCTATACCAAATG
AAATAGGAACCCCTTCTAGGCTTAAGACACTGACATTCTAATAATGCCTGAATGGG
AACTTGCTGCTACCCCTCTAACCTTATCCTCACCTACAGCTGAATGCAGAGAACAA
CCTCCTGACAATCAAATCCCTCAAAGTTAGGTAGATTGCGTAATCTTCTGTTCTGA
TTTGAGTAGAACCAATTAGTGGACATATTCTCAAGCATTGCAAACATTCTCG
CTTAGGCAGCTGATTGTACTGAATAATTCACTGGAGAAATTCCAGTCTCCTTGA
CAGTCAGCGCAGTCTAAATCTCTAACATGTTCTACAATAGCCTCTCAGGTTCTGTC
CCCCTCTGCTTGCCAAGAAATTAACTCAAGCTCATTGTGGAAATTCAACTATGT
GGGTACAGCCCTCAACCCATGTCTTCCAAGCTCCATCACAGGAGTCATTGCC
ACCTCCTGAAGTGTCAAAACATCACCACATAGGAAGCTAACGACCAAAGACATAATT
TCATAGTAGCAGGAGTTCTCCTCGTAGTCCTGATTATACTTTGTTGTCCTGCTTTC
TGCCTGATCAGAAAGAGATCAACATCTAGGCCGGAACGCCAGCCAGGGTAG
AGCGGCCACTATGAGGACAGAAAAAGGAGTCCCTCCAGTTGCTGGTGGTATGTTGAAG
CAGGTGGGAGGCTGGAGGGAAACTAGTCCATTGATGGACCAATGGCTTACAGCT
GATGATCTCTGTGCAACAGCTGAGATCATGGAAAGAGCACCTATGGAACACTGTTA
TAAGGCTATTGGAGGATGGAAGTCAAGTTGCAAGTAAAGAGATTTGAGGGAAAAGATCA
CTAAAGGTATAGAGAATTGAATCAGAAGTCAGTGTCTAGGAAAAATTAGACACCC
AATGTTTGGCTCTGAGGGCCTATTACTGGACCCAAAGGGAAAAGCTCTGGGTT
TGATACATGTCTAAAGGAAGTCTTGTCTTCCATGGAAAGGTTGCTGTGCTGGTT
CTTCTATTAAAGTGTGTTGCTGGCTTTAATTATAATTGGAGTTTACCTTAGT
AATCTGTATAATTCTAACGGAGAACAGTACAAACAAAACACCTAACGAAACAACCT
TANCTTAATATACCATATCAATAAGTGAATATTCTGGTCACTTGATGAGGG
GGAAGTGAACATTCAATTGGCCACAAAGATTAAAATAGCCAAGCCTGGCCGGCT
TGTTGCTTCATTCCCAGGAGAACATCATACTGGACCTNCAGCAATGTGTG
GCTTGATAAAAACAAATGCTAAATTCAAGATTTGGTCTTTGGTGGTATGTCAC
TGCTGCTAATTCAACGTGATAGCTACAGCTGGAGCATTGGATACCGGGCACCTGAGCT
CTCAAAGCTCAAGAAAGCAAACACTAAAAGTACAGTCTGGTGTATCTGT
TAGAACTCTAACGAGGAAATCACCTGGGTGTCTATGAATGGACTAGATTGCTCAG
TGGGTTGCCTCAGTTGTCAGGAGGAGTGGACAAATGAGGTTTTGATGCAAGACTTGAT
GAGAGATGCATCCACAGTTGGCGACGAGTTGCTAAACACGTTGAAGGCTCGCTTGC
GTGTTGATCCTCTCCATCAGCACGACCAAGTCAAGTTCTCCAGCAGCTGAAG
AGATTAGACCAGAGAGATCAGTCACAGCAGTCCGGGACGATATCGTATAGCACAAA
TTTGCATTGATTGGCCAATGTTAGTAGGCCTACTATATATGTTCTATGAT

FIG. 7A

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same

Applicant(s): Lightfoot et al.
Serial No.: 09/772,134

TCTTCATTCTTATATTATTTGCCTGTTGAATGCTGAATTGTACATACTCATAC
TACAATAAGGTGAGTTCTGGTTAATTTACCTCTACCTCAAAGCTGGGTGTAATTCT
GTTTCCTCCAAGGCACATAATAGTTGAAAATAGTTCTCAGGAGCATTGTTATT
TGCAAGATTCTCTTCACGGCTGCTATCTTCTATGCATGCCCTGCCATAAATGCATTA
TGAAGAATTGTAACGGCTGTGTTTGACTTCTTCAAAAAGTTATGTTATTGCCAGG
TGTATATATCAACATGTTAAAGATTTCAAACAATCAGGTTTAGATGTGGGTTGC
ATGCATGAGATTGGACTAGTGCCTGATGTAGTATAAAATATAAATTGTCCAATCAAG
CACCCCTCTACATGTCCAAATAATGGGCCTTATGAAACTTAATTTTAATTACAAACTA
CAGTAATCTTTGAATAAAGATTACAAATTACAACNGACATGTGAAGCNGCATCTT
NATTGNCAATCTTCAAGTTACTCTATTATTTCTGCN

3105bp

FIG. 7B

Rhg1 Peptide

NGRSGKDSGYGACSGGWVGIKCAQGQVIVIQLPWKGRLGRIT
DKIGQLQGLRKLSLHDNQIGGSIPSTLGLLPNLRGVQLFNNRLG
SIP

LSLGFCPLLQSLDLSNNLLTGAIP
YSLANSTKLYWLNLNSFNSFSGPLP
ASLTHSFSLTFSLQNNNLGSGLPNSWGG
NSKNGFFRLQNLILDHNFFTGDVP
ASLGSLRELNEISLSHNKFSGAIP
NEIGTLSRLKTLDISNNALNGNLP
ATLSNLSSLTLLNAENNLLDNQIP
QSLGRLRNLSVLILSRNQFSGHIP
SSIANISSLRQLDLSLNNFSGEIP
VSFDSQRSLNLSNVSYNSLGSVP

PLLAKKFNSSSFVGNIQLCGYSP
STPCLSQ
APSQGVIAPPPEVSKHHHHR
KLSTKDIILIVAGVLLVVLIILCCVLLFCLIRKRS
TSKAGNGQATEGRAATMRTEKGVPPVAGGDVEAGGEAGGKLVHF
DGPMMAFTADDLLCATAEIMGKSTYGTVYKAILEDGSQAVKRLR
EKITKGHREFESEVSVLGKIRHPNGLALRAYYLGPKGEKLLVFD
YMSKGGLLFYMEGSCAGSFIKVLCVLFNYNLEFYLSNLYNSN
RRTVQTKTPKEQHLXFNIPYQ
- SEIFSWSS - CRGN - TFIIGHKMKIXQDLAVACSPSFPETSYMD
LXSSNVCX - NXMLKLQFWSFSDVNCC - FQRDSYSWSIGIPGT -
ALKAQESKH - N - YLQSWCYLVRTPNEEITWG VYEWTRFASVGCL
SCQRGVDK - GF - CRLDERCIHSWRRVAKHVEARFALC - SFSIS
TTRSSSSSPAAGRD-TREISHSQSHLPGRPLEPYSESY

FIG. 7C

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same
Applicant(s): Lightfoot et al.
Serial No.: 09/772,134

Sequences producing significant alignments:

	Score (bits)	E Value
pir:T46070 hypothetical protein T18N14.120 - Arabidopsis thaliana	632	e-180
pir:T47727 hypothetical protein F18O21.60 - Arabidopsis thaliana	344	1e-95
pir:T04587 hypothetical protein F23E13.70 - Arabidopsis thaliana	268	9e-71
pir:T49038 hypothetical protein T5P19.20 - Arabidopsis thaliana	257	2e-67
pir:T48210 hypothetical protein T20L15.160 - Arabidopsis thaliana	241	1e-62
pir:T05050 protein kinase homolog M3E9.30 - Arabidopsis thaliana	238	2e-61
pir:T18536 receptor-like protein kinase - Ipomoea nil (Japanese...)	236	3e-61
pir:T48489 receptor-like protein kinase - Arabidopsis thaliana	236	5e-61
pir:T10515 disease resistance protein Cf-2.2 - currant tomato	235	6e-61
pir:T10504 disease resistance protein Cf-2.1 - currant tomato	235	6e-61
pir:T30553 disease resistance protein Hcr2-5D - tomato	229	4e-59
pir:S27756 receptor-like protein kinase 5 (EC 2.7.1.-) precurso...	227	1e-58
pir:T48499 receptor-like protein kinase-like protein - Arabidop...	226	3e-58
pir:T46033 receptor protein kinase-like protein - Arabidopsis t...	226	4e-58
pir:T05335 hypothetical protein F1C12.190 - Arabidopsis thaliana	221	1e-56
pir:T10636 hypothetical protein T13K14.100 - Arabidopsis thaliana	219	7e-56
pir:T05898 hypothetical protein F6H11.170 - Arabidopsis thaliana	218	1e-55
pir:T45717 receptor-kinase like protein - Arabidopsis thaliana	212	7e-54
pir:T05322 hypothetical protein F18F4.240 - Arabidopsis thaliana	211	1e-53
pir:T10659 probable serine/threonine-specific protein kinase (E...	211	2e-53
pir:T03784 probable receptor protein kinase - rice	208	1e-52
pir:T50851 receptor protein kinase homolog [imported] - soybean	201	1e-50
pir:T45647 receptor protein kinase-like protein - Arabidopsis t...	199	5e-50
pir:T45718 receptor-kinase like protein - Arabidopsis thaliana	199	7e-50
pir:T50850 receptor protein kinase homolog [imported] - soybean	199	7e-50
pir:T45645 receptor kinase-like protein - Arabidopsis thaliana	196	3e-49
pir:T09356 brassinosteroid-insensitive protein BR11 - Arabidops...	196	3e-49
pir:T00712 protein kinase homolog F22O13.7 - Arabidopsis thaliana	190	2e-47
pir:A57676 protein kinase Xa21 (EC 2.7.1.-), receptor type prec...	190	3e-47
pir:S39476 kinase-like transmembrane protein TMKLL1 precursor - ...	188	1e-46
pir:T02154 protein kinase homolog T1F15.2 - Arabidopsis thaliana	188	1e-46
pir:T10725 protein kinase Xa21 (EC 2.7.1.-) A1, receptor type - ...	186	5e-46
pir:T05897 protein kinase homolog F6H11.160 - Arabidopsis thaliana	184	1e-45
pir:T04313 protein kinase Xa21 (EC 2.7.1.-), receptor type - rice	183	3e-45
pir:T10727 protein kinase Xa21 (EC 2.7.1.-) D, receptor type - ...	181	2e-44

FIG. 7D

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same
Applicant: Lightfoot et al.
Serial No.: 09/772,134

>pir:T46070 hypothetical protein T18N14.120 - Arabidopsis thaliana
Length = 836

Score = 632 bits (1613), Expect = e-180
Identities = 329/550 (59%), Positives = 400/550 (71%), Gaps = 2/550 (0%)
Frame = +1

Query: 7 RSGKDSGYGACSGGWVGIKCAQGVIVIQLPKGLRGRITDKIGQLQGLRKLSLHDNQIG 186
+S +S GW GIKC +GQV+ IQLPKGL G I++KIGQL LRKLSLH+N I
Sbjct: 72 KSWNNASSQVCAGIKCLRGQVVAIQLPKGLGGTISEKIGQLGSLRKLSLHNIVIA 131

Query: 187 GSIPSTLGLLPNLRGVQLFNNRLTGSIPSLGFCLCFKSLDLSSNNLTGAIPYSLANSTK 366
GS+P +LG L +LRGV LFNNRL+GSIP+SLG C ++LDLS+N LTGAIP SL ST+
Sbjct: 132 GSVPRSLGYLKSLRGVYLFNNRLSGSIPVSLGNCPPLLQNLDLSSNQLTGAIPPSLTESTR 191

Query: 367 LYWLNLFSNSFSGPLPASLTHFSLTFLSLQNNNLGSGLPNWSGGNSKNGFFRLQNLILD 546
LY LNLSFNS SGPLP S+ S++LTFL LQ+NNLSGS+P+ + NG L+ L LD
Sbjct: 192 LYRLNLFSNSLSPVSLCKHSLLEEVSIHNQLSGSIPPDF----VNGSHPLKTLNLD 247

Query: 547 HNFFTGDVPASLGLSRELNEISLSHNKFGSAIPNEIGTLSRLKTLDISNNALNGNLPATL 726
HN F+G VP SL L E+S+SHN+ SG+IP E G L L++LD S N++NG +P +
Sbjct: 248 HNRFSGAVPVSLCKHSLLEEVSIHNQLSGSIPRECGGLPHLQSLDFSYNSINGTIPDSF 307

Query: 727 SNLSSLTLLNAENNLLDNQIPQSLGRLRNLSVLILSRNQFSGHIPSSIANISSLRQLDLS 906
SNLSSL LN E+N L IP ++ RL NL+ L L RN+ +G IP +I NIS +++LDLS
Sbjct: 308 SNLSSLVSLNLESNLKGPIPDAIDRLHNLTELNLRNKINGPIPETIGNISGIKKLDLS 367

Query: 907 LNNFSGEIPVSFDSQRSLNLFNVSYNSLSGSVPPLLAKKFNSSFVGNIQLCGYSPSTPC 1086
NNF+G IP+S L+ FNFSYN+LSG VPP+L+KKFNSSF+GNIQLCGYS S PC
Sbjct: 368 ENNFTGPIPLSLVHLAKLSSFNVSYNTLSGPVPPVLSKKFNSSFLGNIQLCGYSSNPC 427

Query: 1087 LSQAPSQGVIAPP--PEVSKHHHRKLSTKDIILIVAGVLLVVLIILCCVLLFCLIRKRS 1260
+ + P + + HHHRKLS KD+ILI G LL +L++LCC+LL CLI+KR+
Sbjct: 428 PAPDHHPPLTLSPTSSQEPRKHHHRKLSVKDVILIAIGALLAICLLCILLCLIKKRA 487

Query: 1261 TSRPGTAKPPEGRAATMRTEKVPPVAGGDVEAGGEAGGKLVHFDGPMFTAADDLLCAT 1440
K +G+ T +EK V G AGGE GGKLVHFDGP FTADDLLCAT 1440
Sbjct: 488 -----ALKQKDGDKDT--SEKTVSAGVAGTASAGGEMGGKLVHFDGPVFTADDLLCAT 540

Query: 1441 EIMGKSTYGTVYKAILEDGSQAVKRLREKITKGHREFESEVSLGKIRHPNVLALRAYY 1620
EIMGKSTYGT YKA LEDG++VAVKRLREK TKG +EFE EV+ LGKIRH N+LALRAYY
Sbjct: 541 EIMGKSTYGTAYKATLEDGNEAVKRLREKTTKGVKEFEGEVTALGKIRHQNLALRAYY 600

Query: 1621 LGPKGEKLLGFD 1656
LGPKGEKLL FD
Sbjct: 601 LGPKGEKLLVFD 612

FIG. 7E

Title: Isolated Polynucleotides and Polypeptides Relating to Loci
Underlying Resistance to Soybean Cyst Nematode and Soybean
Sudden Death Syndrome and Methods Employing Same

Applicant(s): [REDACTED] Lightfoot et al.
Serial No.: 09/772,134

Score = 185 bits (464), Expect = 1e-45
Identities = 93/161 (57%), Positives = 122/161 (75%), Gaps = 3/161 (1%)
Frame = +2

Query: 1943 GLVCLHSQENIIHGTSHPAMCGLMKNKC*NS---DFGLFRVDVNCC*FQRDSYSWSIGYR 2113
GL LHS EN+IH + ++ ++ N+ D+GL R+ + + ++GYR
Sbjct: 647 GLAHLHSNENMIH--ENLTASNILLDEQTNAHIADYGLSRLMTAAAATNVIATAGTLGYR 704

Query: 2114 APELSKLKKANTKTDIYSLGVILLELLTRKSPGVSMNGLDLPQWVASVVKEEWTNEVFDA 2293
APE SK+K A+ KTD+YSLG+I+LELLT KSPG NG+DLPQWVAS+VKEEWTNEVF
Sbjct: 705 APEFSKIKNASAKTDVYSLGIIILELLTGKSPGEPTNGMDLPQWVASIVKEEWTNEFDL 764

Query: 2294 DLMRDASTVGDELLNTLKLALHCVDPSARPEVHQVLQQLKRL 2425
+LMR+ +VGDELLNTLKLALHCVDPS+ARPE +QV++QL+ +
Sbjct: 765 ELMRETQSVGDELLNTLKLALHCVDPSAARPEANQVVEQLEEI 808

FIG. 7F